# **EXHIBIT C**

### EXHIBIT C

1		BELLSOUTH TELECOMMUNICATIONS, INC.
2		DIRECT TESTIMONY OF W. KEITH MILNER
3		BEFORE THE GEORGIA PUBLIC SERVICE COMMISSION
4		DOCKET NO. 11641-U
5		MAY 10, 2000
6		
7	Q.	PLEASE STATE YOUR NAME, ADDRESS, AND POSITION WITH
8		BELLSOUTH TELECOMMUNICATIONS, INC.
9.		
10	A.	My name is W. Keith Milner. My business address is 675 West Peachtree
11		Street, Atlanta, Georgia 30375. I am Senior Director - Interconnection
12		Services for BellSouth Telecommunications, Inc. (BellSouth). I have
13		served in my present role since February 1996 and have been involved
14		with the management of certain issues related to local interconnection,
15		resale, and unbundling.
16		
17	Q.	PLEASE SUMMARIZE YOUR BACKGROUND AND EXPERIENCE.
18		
19	A.	My business career spans over 29 years and includes responsibilities in
20		the areas of network planning, engineering, training, administration, and
21		operations. I have held positions of responsibility with a local exchange
22		telephone company, a long distance company, and a research and
23		development laboratory. I have extensive experience in all phases of
24		telecommunications network planning, deployment, and operation
25		(including research and development) in both the domestic and

1		international arenas.
2		
3		I graduated from Fayetteville Technical Institute in Fayetteville, North
4		Carolina in 1970 with an Associate of Applied Science in Business
5		Administration degree. I also graduated from Georgia State University in
6		1992 with a Master of Business Administration degree.
7		
8	Q.	HAVE YOU TESTIFIED PREVIOUSLY BEFORE ANY STATE PUBLIC
9,		SERVICE COMMISSION? IF SO, BRIEFLY DESCRIBE THE SUBJECT
10		OF YOUR TESTIMONY.
11		
12	A.	I testified before the state Public Service Commissions in Alabama,
13		Florida, Georgia, Kentucky, Louisiana, Mississippi, South Carolina, the
14		Tennessee Regulatory Authority, and the Utilities Commission in North
15		Carolina on the issues of technical capabilities of the switching and
16		facilities network regarding the introduction of new service offerings,
17		expanded calling areas, unbundling, and network interconnection.
18		
19	Q.	WHAT IS THE PURPOSE OF YOUR TESTIMONY BEING FILED
20		TODAY?
21		
22	A.	In my testimony, I will address Issue Number 16 of the Petition for
23		Arbitration filed by BlueStar Networks, Inc. (BlueStar) in this docket.
24		
25	Issue	e 16: What is the appropriate method for BlueStar to gain access to

1	BellSouth's riser cables, allowing BlueStar to provision its digital		
2	sub	scriber line access multiplexer (DSLAM)?	
3			
4	Q.	WHAT IS BELLSOUTH'S POSITION ON THIS ISSUE?	
5			
6	A.	BellSouth and BlueStar should negotiate to reach agreement on rates,	
7		terms, and conditions for such access. BellSouth has provided other	
8		Competing Local Exchange Carriers (CLECs) with sub-loop elements and	
9		has done so in a manner of access that retains network reliability,	
10		integrity, and security for both BellSouth's network and the CLEC's	
11		network. BellSouth believes that BlueStar should not be allowed to use its	
12		DSLAM as the point of interconnection between its network and	
13		BellSouth's network nor be allowed to cross-connect directly to	
14		BellSouth's Intrabuilding Network Cable (INC) (sometimes referred to as	
15		"riser cable") or Network Terminating Wire (NTW) for the reasons I will	
16		discuss in this testimony.	
17			
18	Q.	WHAT IS INTRABUILDING NETWORK CABLE (INC) (SOMETIMES	
19		REFERRED TO AS "RISER CABLE)?	
20			
21	A.	In multi-story buildings, INC is that part of BellSouth's loop facilities	
22		extending from the building's cable entrance (often in the basement or on	
23		the first floor) and rising to each floor served by that cable. However,	
24		there is also a second transmission facility called Network Terminating	
25		Wire (NTW) that connects to the INC, in some cases, and in other cases.	

directly to the entrance cable. In either case, the NTW terminates at the end-user's Network Interface Device (NID). Consistent with FCC Part 32 Uniform System of Accounts (USOA), BellSouth designates the distribution cables used inside customers' buildings and between buildings on the same customer's premises as INC. Thus INC is a part of that subloop element referred to as loop distribution and is located on the network side of the demarcation point between BellSouth's other loop facilities and. either directly to or through NTW, the inside wire at an end user customer's premises.

10

1

2

3

4

5

6

7

8

9

#### Q. WHAT IS NETWORK TERMINATING WIRE (NTW)?

12

11

13 A. NTW is another part of the BellSouth loop facilities referred to as the sub-14 loop element loop distribution. In multi-story buildings, NTW is connected 15 to the INC and "fans out" the cable pairs to individual customer suites or 16 rooms on a given floor within that building. In other structures such as 17 "garden apartments", there is no INC and, thus, the NTW connects directly 18 to BellSouth's loop distribution facilities. In this sense, NTW is the "last" 19 component of BellSouth's loop on the network side of the demarcation 20 point. NTW is a BellSouth sub-loop UNE offering which can be purchased alone or in combination with INC, depending on the CLEC's network 22 needs.

23

21

Q. PLEASE DESCRIBE THE NETWORK INTERFACE DEVICE (NID)

25

24

A. Simply stated, the NID provides a demarcation point between BellSouth's facilities (that is, the loop) and the customer's facilities (that is, the inside wire). Thus, the NID provides a way to connect the loop to the inside wire and provides a place to test and determine whether a given trouble condition is the result of problems with the inside wire or problems in the service provider's network.

9.

To summarize, building entrance cables (part of loop distribution) are connected to INC which extends the cable pairs to each floor of the building served by a given entrance cable. The INC pairs are in turn connected to NTW that is in turn connected to the NID. Thus, the NID establishes the demarcation point between BellSouth's network and the inside wire at the end user customer's premises with both NTW and INC being located on BellSouth's side of the demarcation point and, thus, comprising part of BellSouth's network.

Q. IS EITHER NETWORK TERMINATING WIRE (NTW) OR
INTRABUILDING NETWORK CABLE (INC) CLASSIFIED AS INSIDE
WIRE?

A. No. Per Orders in FCC Docket 79-105, wiring which is on the customer's side of the network demarcation point is classified as inside wire. Since neither NTW nor INC is located on the customer's side of the network demarcation point, it is not, by the FCC's definition, "inside wire."

BellSouth does not in any way restrict the use of "inside wire", that is,

wiring on the customer's side of the demarcation point. INC and NTW installed throughout a building resides on the network side of the demarcation point(s). As such, INC is classified in accordance with Part 32 of the FCC's Uniform System Of Accounts as "Intrabuilding Network Cable" (INC), the associated capital costs of which are properly charged to regulated account number 2426. Network Terminating Wire is accounted to expense code 68E.

#### Q. WHAT ARE SUB-LOOP ELEMENTS?

Sub-loop elements are the piece parts that make up the entire loop that Α. extends from the BellSouth central office to the demarcation point between BellSouth's network and the inside wire at the end user customer's premises. Neither sub-loop elements, nor the piece parts referred to as NTW and INC are classified as inside wire. Rather, since these are all on the network side of the demarcation point, they are all parts of BellSouth's loop facilities. However, NTW and INC might be thought of as "sub-sub-loop element unbundling" in that NTW and INC are piece parts of the sub-loop element Loop Distribution. 

Q. HAS THE FCC DEALT WITH THE ISSUE OF THE LOCATION OF THE DEMARCATION POINT BETWEEN A TELECOMMUNICATIONS

SERVICE PROVIDER'S NETWORK AND INSIDE WIRE?

25 A. Yes, in Part 68 of its rules. Part 68.3(b) deals separately with buildings

existing <u>after</u> August 13, 1990, and with buildings existing <u>on or before</u>
August 13, 1990. Following is the entire text of Part 68.3(b)(1) which
deals with buildings existing as of August 13, 1990:

"In multiunit premises existing as of August 13, 1990, the demarcation point shall be determined in accordance with the local carrier's reasonable and non-discriminatory practices. Provided, however, that where there are multiple demarcation points within the multiunit premises, a demarcation point for a customer shall not be further inside the customer's premises than a point twelve inches from where the wiring enters the customer's premises, or as close thereto as practicable."

Following is the complete text of paragraph 68.3(b)(2) which deals with wiring installed after August 13, 1990:

"In multiunit premises in which wiring is installed after August 13, 1990, including major additions or rearrangements of wiring existing prior to that date, the telephone company may [emphasis added] establish a reasonable and nondiscriminatory practice of placing the demarcation point at the minimum point of entry. If the telephone company does not elect to establish a practice of placing the demarcation point at the minimum point of entry, the multiunit premises owner shall determine the location of the demarcation point or points. The multiunit premises owner shall determine whether there shall be a single demarcation point location for all

customers or separate such locations for each customer. Provided, however, that where there are multiple demarcation points within the multi-unit premises, a demarcation point for a customer shall not be further inside the customer's premises than a point 30 cm (12 in) from where the wiring enters the customer's premises, or as close thereto as practicable."

9.

I note that the words "presumption" or "presumed", or anything similar, do not appear in this part of the FCC's Rules. Thus, the FCC's rules in no way express any presumption of, or preference for, demarcation points located at the MPOE.

Q. DOES BELLSOUTH HAVE A REASONABLE AND
NONDISCRIMINATORY POLICY ON DEMARCATION POINTS
BETWEEN BELLSOUTH'S NETWORK AND INSIDE WIRE OWNED OR
CONTROLLED BY THE END USER CUSTOMER OR PROPERTY
OWNER?

Α.

Yes. BellSouth establishes the demarcation point consistent with rules promulgated by the FCC in Docket 88-57. BellSouth has not elected to establish a practice of placing the demarcation point at the MPOE. If, however, the property owner wants BellSouth to establish a single demarcation point to serve the entire building, BellSouth will comply with such a request. If the property owner does not want a single demarcation point, BellSouth provides demarcation points in each tenant's office or

1		Suite.
2		
3	Q.	WHICH PARTY INSTALLS AND MAINTAINS INTRABUILDING
4		NETWORK CABLE?
5		
6	A.	In the situation we are discussing here, that is, in cases where the
7		property owner has <u>not</u> elected to have a single demarcation point for all
8		tenants in a building in accordance with the FCC's Part 68 rules (that is,
9		has not established the demarcation at the MPOE), BellSouth has
10		installed, operated, and maintained INC solely for use in providing service
11		to its customers, both its end user customers and CLECs to whom
12		BellSouth provides loops or sub-loop elements on an unbundled basis.
13		BellSouth includes INC in its mechanized inventory databases for
14		assignments of pairs for such uses as new service or repair as needed.
15		
16	Q.	DOES BELLSOUTH PROVIDE INC OR NETWORK TERMINATING
17		WIRE TO CLEC'S PURSUANT TO INTERCONNECTION AGREEMENTS
18		OR OTHER SUCH AGREEMENTS?
19		
20	A.	Yes. Other telecommunications service providers, including both CLECs
21		and Shared Tenant Service Providers, recognize BellSouth's ownership of
22		INC and NTW. BellSouth has reached agreement on the use of its INC
23		and NTW with several such companies. BellSouth's proposed manner of
24		access retains network reliability, integrity, and security for both
25		BellSouth's network and the CLEC's network. Regarding access to INC,

1		BeilSouth will negotiate with the requesting CLEC to reach agreement on
2		rates, terms, and conditions for such access. In fact, BellSouth recently
3		filed proposed rates for INC with the Georgia Public Service Commission
4		in Docket Nos. 6863-U, 7253-U, and 10692-U.
5		
6	Q.	WHAT ARE THE FEDERAL COMMUNICATIONS COMMISSION'S (FCC
7		REQUIREMENTS ON NETWORK SECURITY.
8		
9.	A.	In its First Report and Order (CC Docket No. 96-98, released August 8,
10		1996) at paragraph 198, the FCC included the following statement:
11		
12		"Specific, significant, and demonstrable network reliability concerns
13		associated with providing interconnection or access at particular
14		point, however, will be regarded as relevant evidence that
15		interconnection or access at that point is technically infeasible."
16		
17		The FCC elaborated further on this point at paragraph 203 of that same
18		order, by stating:
19		
20		"We also conclude, however, that legitimate threats to network
21		reliability and security must be considered in evaluating the
22		technical feasibility of interconnection or access to incumbent LEC
23		networks. Negative network reliability effects are necessarily
24		contrary to a finding of technical feasibility. Each carrier must be
25		able to retain responsibility for the management, control, and

1		performance of its own network." (Emphasis added.)
2		
3		Thus, the FCC's First Report and Order provides clear guidance to find
4		that allowing a CLEC direct access to BellSouth's INC or NTW as
5		proposed by BlueStar is not technically feasible.
6		
7		In fact, one important aspect of the FCC's definition of "technical
8		feasibility" is the recognition that methods of interconnection or access
9		that adversely affect network reliability are "relevant evidence that
10		interconnection or access at that particular point is technically infeasible
11		(First Report and Order, ¶¶ 198, 203) Thus, BlueStar's proposal must b
12		rejected due to its adverse effect on network reliability and security.
13		
14	Q.	WHEN YOU EXAMINE BLUESTAR'S PROPOSAL IN LIGHT OF ITS
15		ADVERSE EFFECT ON NETWORK RELIABILITY AND SECURITY,
16		WHAT IMPACT COULD IT HAVE ON END USER CUSTOMERS?
17		
18	A.	Closer examination of BlueStar's proposal immediately reveals that
19		BlueStar's technicians could, intentionally or unintentionally, disrupt the
20		service provided by BellSouth to its end user customers or the end user
21		customers of CLECs using unbundled sub-loop elements acquired from
22		BellSouth. The FCC requires that "each carrier must be able to retain
23		responsibility for the management, control, and performance of its own
24		network." (First Report and Order, ¶ 203) BlueStar's proposal strikes at
25		the heart of this provision and, if allowed, would render BellSouth

1		incapable of managing and controlling its network in the provision of
2		service to its end user customers. Clearly, the adoption of BlueStar's
3		proposal could place BellSouth in jeopardy of violating the FCC's rules.
4		
5	Q.	IS BLUESTAR'S DSLAM AN APPROPRIATE POINT OF
6		INTERCONNECTION?
7		
8	A.	No. Points of interconnection, wherever they are located, establish where
9.		one service provider's network ends (and thus its responsibilities for
10		provisioning, maintenance, and repair) and where another service
11		provider's network begins. BellSouth believes that some mutually
12		accessible device such as an access terminal is a far more appropriate
13		point of interconnection than a DSLAM. I do not believe BlueStar would
14		want BellSouth doing testing and related work on BlueStar's DSLAM
15		equipment to determine whose network needed repair. Such would be the
16		case, however, if BlueStar's DSLAM equipment also served as the point of
17		interconnection between BellSouth's network and BlueStar's network.
18		
19	Q.	ARE YOU AWARE OF ANY STATE COMMISSION THAT HAS
20		ADDRESSED THE ISSUE OF DIRECT ACCESS TO INC OR SIMILAR
21		CABLE THAT IS SOMETIMES REFERRED TO, GENERICALLY, AS
22		RISER CABLE?
23		
24	A.	No. However, this Commission and the Florida Public Service
25		Commission have considered this same issue of access in the context of

1		N I W in the arbitration proceedings between belisouth and MediaOne in
2		Docket Nos. 10418-U and 990149-TP, respectively.
3		
4	Q.	IS THE USE OF NETWORK TERMINATING WIRE IN MULTIPLE
5		RESIDENTIAL DWELLING UNITS SIMILAR TO THE USE OF INC
6		AND NTW IN MULTI-STORY BUILDINGS?
7		
8	A.	Yes. In my view, the serving principles and technology are
9.		essentially the same.
10		
11	Q.	WHAT DID MEDIAONE WANT IN THE NTW DOCKETS DISCUSSED
12		ABOVE?
13		
14	A.	MediaOne wanted direct access to BellSouth's terminals at which
15		BellSouth terminates its NTW for multiple residential dwelling units without
16		the involvement of a BellSouth technician.
17		
18	Q.	WHAT WAS BELLSOUTH'S PROPOSAL AS PRESENTED IN THE
19		MEDIAONE DOCKETS?
20		
21	A.	I proposed the following in my direct testimony:
22		
23		"BellSouth offers a reasonable method of access to the NTW
24		in BellSouth's garden terminal. Using BellSouth's proposed
25		method, the CLEC installs its own terminal in proximity to the

BellSouth garden terminal. BellSouth installs an access terminal that contains a cross-connect panel on which 2 BellSouth will extend the CLEC requested NTW pairs from 3 the garden terminal. The CLEC will then extend a tie cable 4 5 from their terminal and connect to the pairs they have requested. The CLEC would then install its own Network 6 Interface Device (NID) within the end-user apartment and 7 connect the CLEC requested pair(s) to this NID. This 8 manner of access retains network reliability, integrity, and 9 10 security for both BellSouth's network and the CLEC's 11 network." 12 13 Q. WHAT WAS THIS COMMISSION'S RULING IN THE MEDIAONE DOCKET? 14 15 16 This Commission found that MediaOne should gain access to BellSouth's 17 facilities through the use of an access terminal but that at the time of 18 providing service to a particular end user customer no BellSouth 19 technician need be involved in the process. In its Order at page 10, the 20 Commission stated: 21 22 As stated in the prior section, to the extent there is not currently a 23 single point of interconnection that can be feasibly accessed by

1

24

25

MediaOne, consistent with the FCC's Third Report and Order,

BellSouth must construct a single point of interconnection that will

be fully accessible and suitable for use by multiple carriers. Such single points of interconnection shall be constructed consistent with MediaOne's proposal such that MediaOne shall provide its own cross connect (CSX) facility in the wiring closet to connect from the building back to its network. MediaOne would then be able to connect its customers within the MDU [that is, the Multiple Dwelling Unit] by means of an "access CSX".

Q. WHAT IS YOUR UNDERSTANDING OF THE GEORGIA COMMISSION'S ORDER?

12 A. BellSouth will construct an "access CSX" to which it will terminate all of the
13 NTW pairs. MediaOne, and any other interested CLEC, will then have
14 access to any NTW pair on the access CSX that is not being used by
15 BellSouth or another CLEC, pursuant to the terms of the parties'
16 interconnection agreement. What the Georgia Commission did not allow
17 was for BellSouth to require the use of its technicians to perform the
18 cross-connects between the parties' networks on a pair by pair basis.

Q. WHAT WAS THE FLORIDA COMMISSION'S RULING IN ITS
MEDIAONE DOCKET?

A. The Florida Commission denied MediaOne's request for direct access to NTW and required an access terminal to be placed between BellSouth's network and MediaOne's network. The access terminal gives MediaOne

the access to NTW it desires without reducing network reliability and security. The Florida Commission determined that MediaOne and others could gain access to unbundled NTW without reducing network security and reliability by adopting BellSouth's proposed form of access. A portion of that Order beginning on page 17 follows:

The record does not contain evidence of any case which would support a proposal where one party is seeking to use its own personnel to, in effect, modify the configuration of another party's network without the owning party being present. We find that MediaOne's proposal to physically separate BellSouth's NTW cross-connect facility from BellSouth's outside distribution cross-connect facilities is an unrealistic approach for meeting its objectives. Therefore, BellSouth is perfectly within its rights to not allow MediaOne technicians to modify BellSouth's network.

...Based on the evidence presented at the hearing, we believe that it is in the best interests of the parties that the physical interconnection of MediaOne's network be achieved as proposed by BellSouth.

ORDER REACH THE SAME CONCLUSION WITH REGARD TO THE METHOD OF ACCESS TO NTW?

Yes. It is BellSouth's understanding that both orders require the use of an 1 Α. 2 access terminal to separate BellSouth's network from the networks of 3 CLECs. BellSouth believes that the use of access terminals as ordered by this Commission and the Florida Commission gives CLECs the requisite 4 access to unbundled sub-loop elements while still maintaining adequate 5 network reliability and security. 6 7 Q. WERE THERE ANY DIFFERENCES BETWEEN THE FLORIDA 8 9 MEDIAONE ORDER AND THE GEORGIA MEDIAONE ORDER? 10 11 Yes. In the Florida order, only BellSouth is permitted to install the cross-Α. 12 connects from BellSouth's network to the access terminal. In the Georgia 13 order, MediaOne (or other CLEC), may install the cross-connects from 14 MediaOne's network to the access terminal and may also disconnect a 15 non-working BellSouth jumper at the access terminal if MediaOne wins the 16 business of the end user customer. 17 18 Q. DO YOU BELIEVE THE GEORGIA COMMISSION SHOULD REACH THE 19 SAME CONCLUSION REGARDING THE METHOD OF ACCESS TO INC. 20 AS IT DID FOR NTW? 21 22 A. Yes, but only in part. BellSouth believes that the use of an access 23 terminal to which the networks of BellSouth and the CLECs are both

connected is an appropriate method of providing access to the sub-loop

24

25

element INC.

1		
2	Q.	DO YOU BELIEVE THE GEORGIA COMMISSION SHOULD REACH THE
3		SAME CONCLUSION REGARDING THE INSTALLATION OF THE
4		CROSS-CONNECTS FROM BELLSOUTH'S NETWORK TO THE
5		ACCESS TERMINAL FOR INC AS IT DID FOR NTW?
6		
7	A.	No. In a simple residential garden apartment situation, bridging the
8		working BellSouth lines over to the access terminal could, in fact, disturb
9.		working customers' services, but, it is hoped, with minimal adverse impact.
10		However, in a commercial high rise building involving business customers
11		with high speed digital data services operating 24 hours per day, any
12		disturbance of a working circuit, such as would occur when attempting to
13		fully duplicate all INC and NTW pairs, would cause irreparable harm to
14		existing services and subject BellSouth to lawsuits and out-of-service
15		claims. Furthermore, such interruptions could and would be considered by
16		some customers as a serious breach of security.
17		
18	Q.	WHAT IS BELLSOUTH'S PROPOSAL FOR PROVIDING ACCESS TO
19		INC AND/OR NTW IN COMMERCIAL ENVIRONMENTS?
20		
21	A.	In a commercial environment, BellSouth will provide access to spare INC
22		and/or NTW pairs as requested by the CLEC by terminating such pairs on
23		separate connecting blocks serving as an access terminal for easy access
24		by the CLEC. It is impractical and uneconomic for BellSouth to "bridge" all
25		INC and NTW pairs in such situations. BellSouth's proposal avoid

unnecessary work on pairs for which CLECs are not requesting access, thus avoiding potential harm to the network and those existing customers' services. However, the CLECs' needs will be met because they will have access to INC and/or NTW pairs as needed.

Q. WHAT IS THE DIFFERENCE IN RECORD KEEPING FOR INC AND NTW AND WHY IS THIS DIFFENCE IMPORTANT?

Α.

There are significantly increased risks to customer service because of the differences in the record keeping requirements between NTW and INC. The crucial difference between INC and NTW is that NTW records are not inventoried in mechanized systems while INC records are maintained in mechanized systems. These mechanized systems are usually not accessible by BellSouth's field technicians. NTW records consist generally as paper tags on each pair of wires that are present at the NTW terminal. A technician can determine the use to which a particular circuit is being put while on-site either via the tag or by electrically testing the NTW. Such intrusive testing is the cause of previously mentioned disturbance of the line. Such intrusive testing cannot be done without interrupting existing line transmissions.

By contrast, INC records are mechanized records not available at the access terminal. As inventoried records, individual assignments of INC pairs are made as orders for service are processed. Should particular INC pairs become unusable, a notation is made in the records system so that

the pairs are not assigned as the need for additional pairs arise. Thus, a field technician has no way of using particular INC pairs without risking disruption of service to existing end user customers. Using a test set to determine whether the cable pair is in use would disrupt an in-progress transmission. Utilizing INC pairs at random will result in taking an existing end user customer out of service, or in having the new end user customer's service be inoperable because of a faulty INC pair. Should a technician by chance choose a spare INC cable pair and successfully install the end user customer's service, there is no means of protecting that service from potential disruptions resulting from the next technician entering that work area, no matter whether that technician is employed by BellSouth, BlueStar, or another CLEC. As subsequent technicians enter the work scene, the existing cable pair INC records would progressively deteriorate, creating an immediate and significant service problem that would be extremely costly and difficult to correct.

Q. WHAT MEANS OF ACHIEVING A PROPERLY MAINTAINED ACCESS
TERMINAL SHOULD BE ADOPTED BY THE GEORGIA COMMISSION?

Α.

BellSouth believes the appropriate method is to require BellSouth to construct an access terminal for spare INC pairs as may be requested by a CLEC, specifically the number of pairs needed and the floors at which the pairs are needed. BlueStar (and other CLECs) would interconnect their network to these individually constructed access terminals. Such a methodology would permit CLECs appropriate access to end user

1		customers write providing both companies the ability to maintain
2		appropriate records on an on-going basis.
3		
4	Q.	HAVE YOU PREPARED AN EXHIBIT WHICH ILLUSTRATES
5		BELLSOUTH'S PROPOSAL IN THIS DOCKET?
6		
7	Α.	Yes. Exhibit WKM-1 contains three (3) pages that I hope aid in
8		understanding this issue. BellSouth provides CLECs with access to
9.		BellSouth's facilities via the access terminal which is cross-connected by
10		tie cable pairs with the terminals of both BellSouth and the CLEC thus
11		allowing an CLEC access while preserving network reliability and security.
12		Page 1 shows a typical serving arrangement in multi-story buildings for
13		which BellSouth is the sole provider of telephone service. Page 2 shows
14		BellSouth's proposed form of access for BlueStar and any other CLEC. It
15		utilizes an access terminal that is cross-connected by tie cable with the
16		terminals of both BellSouth and BlueStar. Page 3 shows BellSouth's
17		understanding of BlueStar's proposed form of access. It shows that both
18		BellSouth and BlueStar's loop facilities would be terminated in the same
19		terminal, thereby giving BlueStar direct access to all the INC pairs
20		including those used by BellSouth's end user customers and other CLECs
21		end user customers in cases where the CLEC provides service in part via
22		unbundled sub-loop elements acquired from BellSouth.
23		
24	Q.	IS THE METHODOLOGY PROPOSED BY BELLSOUTH APPROPRIATE
25		FOR PROVIDING BLUESTAR'S ACCESS TO BELLSOUTH'S INC

1		WHILE ALSO ALLOWING BLUESTAR TO PROVISION ITS OWN
2		DSLAM?
3		
4	A.	Yes. BlueStar would provision its DSLAM on its side of the access
5		terminal thereby removing the DSLAM as a matter of concern to
6		BellSouth.
7		
8	Q.	DOES BELLSOUTH'S PROPOSAL ADEQUATELY ADDRESS
9.		NETWORK RELIABILITY AND SECURITY CONCERNS?
10		
11	A.	Yes. The access terminal provides a technically feasible method of
12		separating BellSouth's network and BlueStar's network in a manner that
13		permits each company complete control of and responsibility for the
14		maintenance and repair of its facilities.
15		
16	Q.	IS IT POSSIBLE FOR SERVICE PROVIDERS SUCH AS BLUESTAR TO
17		SELF PROVISION ITS OWN INC AND NETWORK TERMINATING
18		WIRE?
19		
20	Α	Yes. There are many cases where INC capacity must be augmented to
21		allow growth of customer lines. Such augmentation of capacity is routine.
22		The floor penetrations rising between floors are often shared by the
23		service providers in a given building. Most importantly, BellSouth is not
24		opposed to providing its INC to BlueStar or any CLEC on an unbundled
25		basis. BellSouth's concern is with the manner in which that access is

1		achieved.
2		
3	Q.	WHAT ISSUES ARE ROUTINELY CONFRONTED IN THE
4		AUGMENTATION OF INC AND NETWORK TERMINATING WIRE
5		CAPACITY?
6		
7	Α	BellSouth, itself, is faced with the issue of reinforcing INC on a daily basis,
8		as are other CLECs who provide their own equivalents to BellSouth's
9		Intrabuilding Network Cable. In most cases, there are spare pathways
10		and spaces that can be used, subject to approval by the building owner. A
11		key activity is to review building infrastructure and obtain the owner's
12		permission to use such prior to making a commitment to provide service to
13		tenants/end users. In cases where additional through-floor penetrations
14		are required and the building owner refuses to allow such work to be
15		performed, any carrier, including BellSouth, would have to consider the
16		option of leasing spare facilities from another carrier. Where spare cable
17		pairs are available, BellSouth offers Intrabuilding Network Cable as a
18		UNE. In summary, BlueStar is free in many cases to provide its own INC,
19		to lease INC from another CLEC, or to lease it from BellSouth.
20		
21	Q.	WHAT IS YOUR UNDERSTANDING OF BLUESTAR'S PROPOSED
22		METHOD OF ACCESS TO BELLSOUTH'S INC CABLE?
23		•
24	A.	BellSouth's understanding of BlueStar's proposed form of access is shown
25		on Page 3 of my Exhibit WKM-1, which is attached to this testimony. It

shows that both BellSouth and BlueStar's loop facilities would be terminated in the same terminal, thereby giving BlueStar direct access to all the INC pairs, including those used by BellSouth's end user customers and other CLECs' end user customers in cases where the CLEC provides service in part via unbundled loops or sub-loop elements acquired from BellSouth.

7

8

1

2

3

4

5

6

#### Q. WHAT IS THE PROBLEM WITH BLUESTAR'S PROPOSAL?

9.

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Α.

BlueStar's proposal needlessly increases the risk of customer service interruptions, both to BellSouth's retail customers as well as to other CLECs' customers. Service providers other than BellSouth have also installed INC in particular buildings and BlueStar's use of those facilities without notice or consent could likewise result in service outages for the other service provider's customers. Closer examination of BlueStar's proposal immediately reveals that BlueStar's technicians could, intentionally or unintentionally, disrupt the service provided by BellSouth to its end user customers or the end user customers of CLECs using unbundled loops or sub-loop elements acquired from BellSouth. The FCC requires that "each carrier must be able to retain responsibility for the management, control, and performance of its own network." (First Report and Order 96-325, ¶ 203) BlueStar's proposal, if allowed, would render BellSouth incapable of managing and controlling its network in the provision of service to its end user customers. How BlueStar believes accurate records of INC inventory (that is, INC pairs in use, spare, or

1 defective) might be maintained is a mystery. Further, BellSouth (and any 2 other provider of INC) would be at BlueStar's mercy to inform the owner of 3 the INC as to when, where, and how BlueStar used its property. In the 4 day-to-day provisioning of services, it is unrealistic to assume that 5 technicians will routinely "call in" to report a pair used. BellSouth's INC 6 pair assignment mechanized records process avoids this problem. 7 8 WHAT FUNCTION OR PURPOSE IS SERVED BY THE ACCESS Q. 9 TERMINAL IN THE ARRANGEMENT PROPOSED BY BELLSOUTH? 10 11 A. The access terminal provides an obvious, unambiguous means of 12 providing unbundled access to BellSouth's INC cable without degrading 13 network security and service reliability. Installation of the access terminal 14 costs time and material and BellSouth is entitled to recover both from the 15 cost causer, in this case, BlueStar. 16 17 Q. WHAT SERVICE RISK ENSUES FROM A SERVICE PROVIDER 18 HAVING DIRECT ACCESS TO BELLSOUTH'S INC OR NTW AND 19 USING SUCH WITHOUT BELLSOUTH'S KNOWLEDGE OR 20 PERMISSION? 21 22 Α. Such actions would put at risk not only the service to BellSouth's own 23 retail customers but also the customers of CLEC's lawfully using INC 24 cable acquired from BellSouth. Likewise, such behavior would also put at 25 risk the service to the customers of any other service provider which has

provisioned its own INC and which was similarly used without the owner's knowledge or permission.

Q. IF BLUESTAR WERE TO AGREE TO BELLSOUTH'S PROPOSED
 FORM OF ACCESS TO INC AND NTW, MUST A BELLSOUTH
 TECHNICIAN BE DISPATCHED TO THE CUSTOMER'S PREMISES
 EACH AND EVERY TIME BLUESTAR ACQUIRES A CUSTOMER AND
 WANTS TO PROVIDE SERVICE TO THAT CUSTOMER IN PART USING
 BELLSOUTH'S INC AND NTW?

A. No. BlueStar may request and BellSouth will provide INC cable pairs on a pre-wired basis such that the these pairs are already available to BlueStar at the time it chooses to provide service to its customer without having to wait for BellSouth to complete any required cross connections. Thus, BellSouth's work (both for installing the access terminal and for extending any INC cables to the access terminal for BlueStar's subsequent use) may be done well in advance of any actual service provisioning to a given end user customer. While pre-wiring does require BlueStar to begin paying the monthly lease fees immediately, this is a business decision that is entirely at BlueStar's option. BlueStar does not have to wait for BellSouth to complete a cross connection or for any other provisioning activity if BlueStar has previously requested and BellSouth has provided pre-wired connections to the INC and network terminating wire.

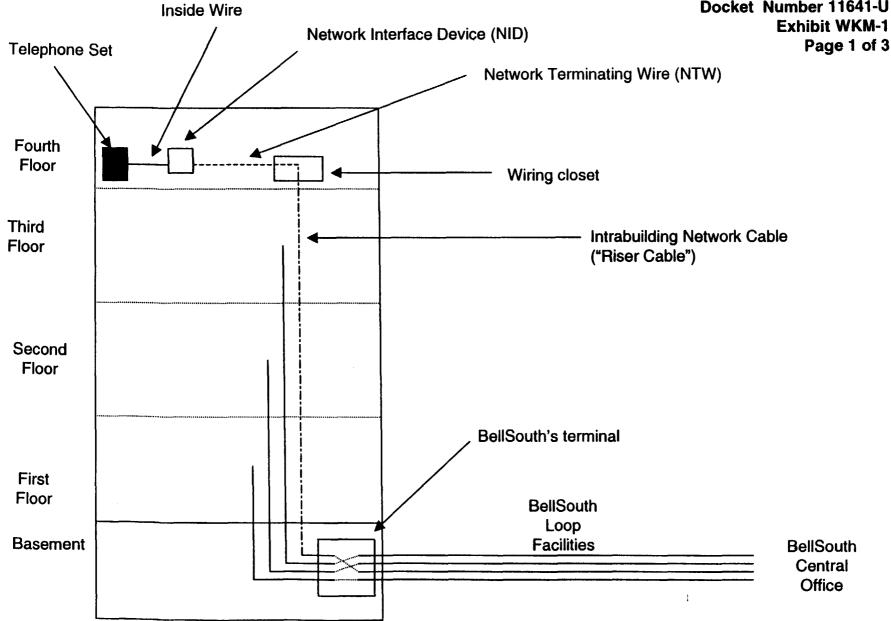
1 Q. DOES THIS CONCLUDE YOUR TESTIMONY?

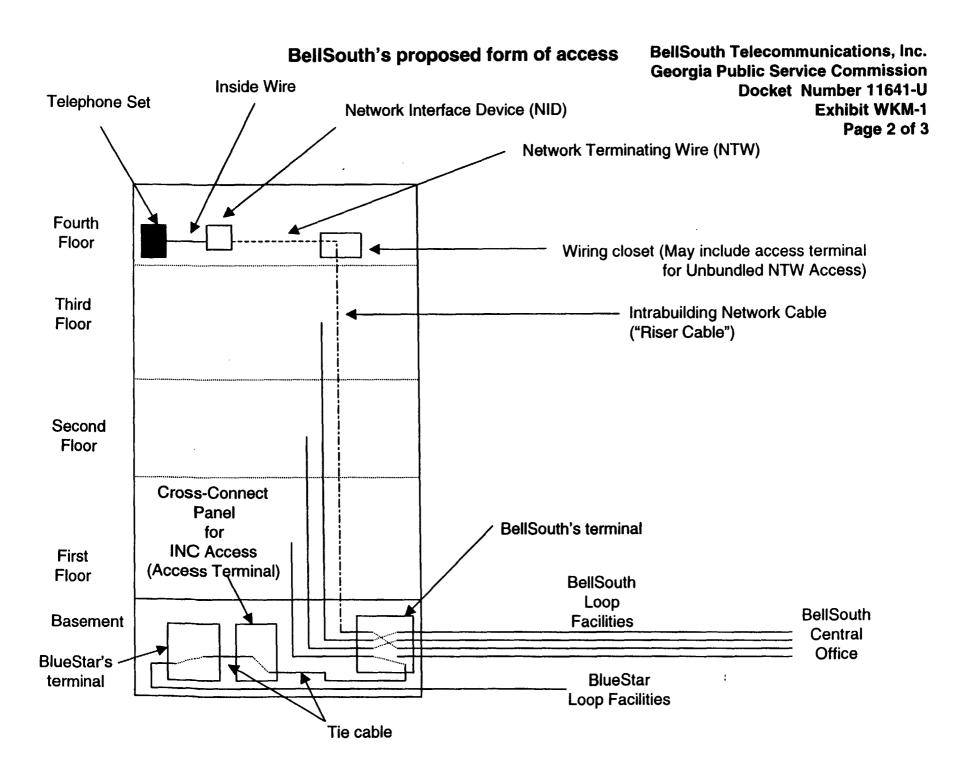
2

3 A. Yes.

#### Typical existing serving arrangement

BellSouth Telecommunications, Inc. **Georgia Public Service Commission Docket Number 11641-U Exhibit WKM-1** 





## BellSouth's understanding of BlueStar's proposed form of access

BellSouth Telecommunications, Inc.
Georgia Public Service Commission
Docket Number 11641-U
Exhibit WKM-1
Page 3 of 3

